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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

HAMANO et al

Atty. Ref.: 1417-550; Confirmation No. 2305

Appl. No. 10/594,668

TC/A.U. 1711

Filed: September 28, 2006

Examiner: Unknown

For: POLYBUTYLENE TEREPHTHALATE

* * * * *

December 14, 2006

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

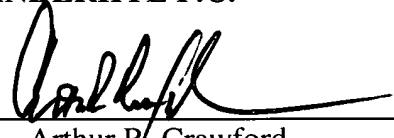
SUBMISSION OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

Attached is a copy of the International Preliminary Report on Patentability (English version) mailed October 26, 2006 and issued in the underlying International patent application.

Please consider this information when examining the above-identified u.s. national stage application.

Respectfully submitted,

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PATENT COOPERATION TREATY

PCT/JP2005/005905

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(c) and 72.2)

To:

OKADA, Kazuhiko
Okada & Associates
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10-1, Kudan-Kita 1-chome
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JAPAN



A236 PCT

Date of mailing (day/month/year) 26 October 2006 (26.10.2006)	
Applicant's or agent's file reference A4165-WO	IMPORTANT NOTIFICATION
International application No. PCT/JP2005/005905	International filing date (day/month/year) 29 March 2005 (29.03.2005)
Applicant MITSUBISHI CHEMICAL CORPORATION et al	

1. Transmittal of the translation to the applicant.



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Yoshiko Kuwahara
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference A4165-WO	FOR FURTHER ACTION		See item 4 below
International application No. PCT/JP2005/005905	International filing date (day/month/year) 29 March 2005 (29.03.2005)	Priority date (day/month/year) 01 April 2004 (01.04.2004)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant MITSUBISHI CHEMICAL CORPORATION			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland		Date of issuance of this report 19 October 2006 (19.10.2006)
Facsimile No. +41 22 338 82 70		Authorized officer Yoshiko Kuwahara e-mail: pt07@wipo.int

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

<p>To:</p>		<p>WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY</p> <p>(PCT Rule 43bis.1)</p>	
<p>Date of mailing (day/month/year)</p>		<p>Applicant's or agent's file reference A4165-WO</p>	
<p>FOR FURTHER ACTION See paragraph 2 below</p>		<p>International application No. PCT/JP2005/005905</p>	
<p>International filing date (day/month/year) 29.03.2005</p>		<p>Priority date (day/month/year) 01.04.2004</p>	
<p>International Patent Classification (IPC) or both national classification and IPC</p>			
<p>Applicant MITSUBISHI CHEMICAL CORPORATION</p>			

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

<p>Name and mailing address of the ISA/JP</p>	<p>Authorized officer</p>
<p>Faxsimile No.</p>	<p>Telephone No.</p>

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/005905

Box No. 1

Body of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/005905

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-14	YES
	Claims		NO
Inventive step (IS)	Claims	1-14	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO
2. Citations and explanations:			
<p>Document 1: US, 2003/69339, A1 (Mitsubishi Engineering-Plastics Corp.), 10 April, 2003 (10.04.03)</p> <p>Document 2: JP, 10-310638, A (Polyplastics Co., Ltd.), 24 November, 1998 (24.11.98)</p> <p>Document 3: JP, 8-3428, A (Teijin Ltd.), 9 January, 1996 (09.01.96)</p> <p>Claims 1-14</p> <p>The subject matters of claims 1-14 appear to involve an inventive step in view of documents 1-3 cited in the ISR.</p> <p>Documents 1-3 do not describe that polybutylene terephthalate with a terminal carboxyl group concentration of 0.1 to 18 µeq/g is obtained using a titanium compound and a compound of a group 2A metal of the periodic table as catalysts. On the other hand, the invention of the present application with this constitution exhibits an advantageous effect that the polybutylene terephthalate is excellent in hydrolysis resistance, thermal stability, transparency and moldability and decreased in foreign matter.</p>			